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A University Union and Dormitory

Architecture

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A UNIVERSITY UNION AND DORMITORY

BY

JOHN GOODFELLOW FLEMING

THESIS

FOR THE

DEGREE OF BACHELOR OF SCIENCE

IN

ARCHITECTURE

COLLEGE OF ENGINEERING

UNIVERSITY OF ILLINOIS

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JUNE 1st, 1912.

THIS IS TO CERTIFY THAT THE THESIS PREPARED UNDER MY SUPERVISION BY

JOHN GOODFELLOW FLEMING

ENTITLED A UNIVERSITY UNION AND DORMITORY

IS APPROVED BY ME AS FULFILLING THIS PART OF THE REQUIREMENTS FOR THE

DEGREE OF BACHELOR OF SCIENCE IN ARCHITECTURE

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GENERAL PROGRAM

This design has for its object the study of a building which shall fulfill in part the living requirements of some of the men students in a small university.

The campus of this university is very extensive, since it is located in the fertile, rolling prairies of a small town and is surrounded by a beautiful residence district. The campus is laid out in the natural style, with winding drives and walks curving through grassy areas which are enclosed by masses of trees and shrubs.

In accordance with the general style and layout of the campus this dormitory has been designed in order to obtain a rather assymmetrical picturesque effect. The general style of the buildings on the campus is that of the English Gothic, the necessary variety in unity being obtained by varying the details of the style to suit the needs of the university buildings.

This building has been considered as only one of a series of dormitory units which while similar in general layout are varied sufficiently to avoid producing the effect of a series of monotonous barracks; this arrangement of small units allowing of a ready expansion to meet the needs of a growing university. The building has purposely been kept rather small, in order to give a more homelike atmosphere to the surroundings of the men who are to live in them continuously.

Following the general principles of the best of the modern dormitories the U shaped building has been placed with the open court facing the south, giving the maximum of sunlight to the living and social rooms. For this reason the entrance tower has been placed upon the north west where it will take up the minimum of the sun lighted surface of the building.

The refectory, which is placed immediately to the south of the entrance tower, has been given its position in order to get a pleasant exposure at the times when meals are being served to the students. It has been made large enough to accomodate some of the students who live in the nearby town, as well as those who live in the building.

The social rooms on the first floor are used for the purposes of the University union, the term having been freely interpreted to mean a union of the students in the several dormitories, each having its own general social rooms in the dormitory buildings. These rooms have been so placed that they may be thrown together for social purposes or may be used independently, as the case may demand.

Suites of rooms have been provided to accomodate from sixty to seventy five students, the number varying accordingly as the rooms are used singly or in two room suites, arrangement having been made for the use of either type.

METHOD OF STUDY

As a preparation for this problem in design a careful study has been made of similar buildings in England from the fourteenth century to the present time. Dormitories have been studied as they appear in other foreign countries, but necessarily to a lesser extent.

The ecclesiastical designs of the American firm of Cram, Goodhue, and Ferguson have been given careful consideration, since the work of this firm is generally recognized as the best of its kind in this country. Also the books written by Mr. R.A.Cram, the senior member of the above firm, have furnished several ideas with regard to the proper designing of such buildings.

A number of sketches were made of various ancient and modern buildings in the style of the English Gothic, in order to become familiar with the general characteristics of the style. These sketches included approximately thirty sheets of plans, elevations, sections, perspectives, and details of buildings ranging in type from churches to monasteries.

After the preliminary study of the general style had been made, the ideas obtained from it were applied to a series of block plans which involved the general mass of the building and its orientation. The latter consideration was given much attention, as the lighting of a dormitory is of

great importance, since so many students are to spend their time in it.

The general plan which was chosen for this problem was a U shaped one with the open court facing the south. This scheme was chosen because of the ease with which the dormitories could be lighted from all sides, and also to gain the necessary privacy for the suites of student rooms.

A large number of small scale plans, elevations, and sections were drawn, in order to gain an idea of the general mass and outline of the group, and the relative proportion of the various parts of the composition. In order to establish a basis of comparison several different schemes were worked up and the best one selected from among them. At this stage of the study, several block perspectives were drawn, to show the inter-relation of the parts of the group around the court.

The drawings were gradually increased in scale until they had reached that of the required final drawings. The different drawings were then redrawn several times, in order to compare the different modes of decoration on the exterior and interior of the building.

From this outline of the method of study used on this design problem, it may be seen that the final drawings in themselves do not represent the amount of time or effort put forth on the thesis, but merely the results attained from a series of studies made through one semester and reaching completion in the final drawings, which are the work of a few weeks.

HISTORICAL

The following descriptions of the uses of a dormitory have been obtained from various standard sources:-

A room or set of rooms intended for sleeping accommodations, hence a building in which such rooms exist. The term is used chiefly for accommodations for many sleepers at one time, either in a single unbroken interior, or in small closets or rooms arranged under a common roof. The term may be applied in either of the following ways:- (1) to a building connected to a college and intended for the lodging of students, in which case the term is stretched to include the rooms for study, (2) to the sleeping accomodations of a convent or monastery. The latter may be called a dorter or dortour.

A building at, or belonging to, a school or college in which students study and sleep, and sometimes board; also any large room in which a number of persons sleep.

Dormitories of various kinds have been used for several centuries, the earliest known example being the dormitory of the monastery. Originally the building consisted of a room for monks, containing beds or sleeping cells. It was usually one story in height and connected to the church or chapel.

The dormitories of the English colleges of the fourteenth and fifteenth centuries are the earliest examples

of collegiate dormitories. The general type is that of a quadrangle, enclosed by buildings containing the chapel, hall, library, kitchens, buttery, master's lodgings, and rooms for the fellows and pupils. The court was entered through the entrance gate, which was surrounded by the lodge of the porter. The chapel was generally placed on the north side of the quadrangle, which was square with an east and west axis whenever practicable. The buildings around the court were not over one room in width, the object being to get windows on two opposite sides of each room. The advantages gained by grouping the buildings around a closed court were:- (1) security against thieves and undesirable strangers, (2) quiet retirement and seclusion within.

The courts of the colleges at Cambridge before the sixteenth century were all very small, the general shape being that of a rectangle with a maximum length of one hundred and fifty feet. The enclosing buildings were never over two stories in height, as this gave plenty of room to the few fellows who were in attendance. The desirable features in such a plan were:- (1) lowness of skyline, and (2) narrowness of enclosing buildings.

The effect of the low buildings is one of great beauty and restfulness. In general it may be said that a small court surrounded by high buildings carries with it a feeling of depression to the beholder. In strong contrast to this is the large court with its enclosing buildings, the group being interesting because the aforesaid state of affairs is reversed. A good example of the latter effect is that of

the great court of Trinity College, Cambridge. In this case the beautiful effect of quiet simplicity is produced by the great size of the court, two hundred and seventy five feet by three hundred feet, together with the lowness and irregularity of the enclosing ranges of buildings. The groups of student rooms are arranged on two sides of the court, thus allowing the higher entrance gate, chapel, and hall to assert themselves.

The buildings being very low, much sunlight passes over them and into the interior court. The chapel is placed on the north side, since its greater height would have obstructed the passage of sunlight into the court, if it had been placed in any other position. The original building had wings one room in width, with the kitchen at the extreme end, to keep the odors from the general rooms. At the kitchen end, a passageway through the building separated the kitchen from the group of student rooms. In modern times this passageway has become a connection between the old and new courts. This hall in Girton College is very conveniently located, as it may be approached either from the aforesaid enclosed passageway, or from the north-hall cloister.

In the old days, the master had one or two rooms for his bachelor suite. Such suites were generally placed between the hall and library, at a distance from the kitchen. In modern times the master has a suite of rooms in a separate building. This accounts for the rambling grouping of the buildings at the present time. In the early buildings each fellow had one large room with a sport-door which opened on

to the passageway. The room had windows on each side of the building, as the width of the wing equaled the width of the room unit. The interior was roughly finished in panelled wood with a floor of slabs. Sometimes one fellow or tutor lived with two or three pupils in a suite of two rooms, the study and the large sleeping room. Such a suite was well adapted for rugged, healthy life, as the cross ventilation and bright sunlight reached every corner. The buildings were heated by fireplaces which were located in the partitions separating the independent sections of the building.

At the present time the plan of the dormitory building is more complex than formerly was the case, largely because of the fact that each suite of rooms has become as complex as a flat or apartment. Each tier of rooms in the section, is carried up from the first floor, with its own independent stairways.

The following points are considered as important in the planning of such a building:- (1) the sitting room should have some sunlight, (2) the bed room should have a minimum floor space of one hundred square feet, and should have large windows open to the sunlight, (3) a current of fresh air through the rooms should be possible when the outer door to the suite is closed; for this reason the windows of the sitting room and bed room should not face the same direction, (4) each set of rooms must fulfill its part of the requirements for a complete house, (5) the fireplace may be utilized as a means of mechanical ventilation for at least four people, (6) it is economical to have a unit of

three floors and attic, with eight sets of rooms to the staircase, with one caretaker per unit.

As dormitories have been used in England for many more years than in this or any other country, this historical account has been largely confined to the buildings of England.

The University union buildings have only been in use in this country for a few years, hence their requirements have not yet been standardized. For this reason the University union in this thesis has been interpreted to mean the provision of suitable social rooms for student use.

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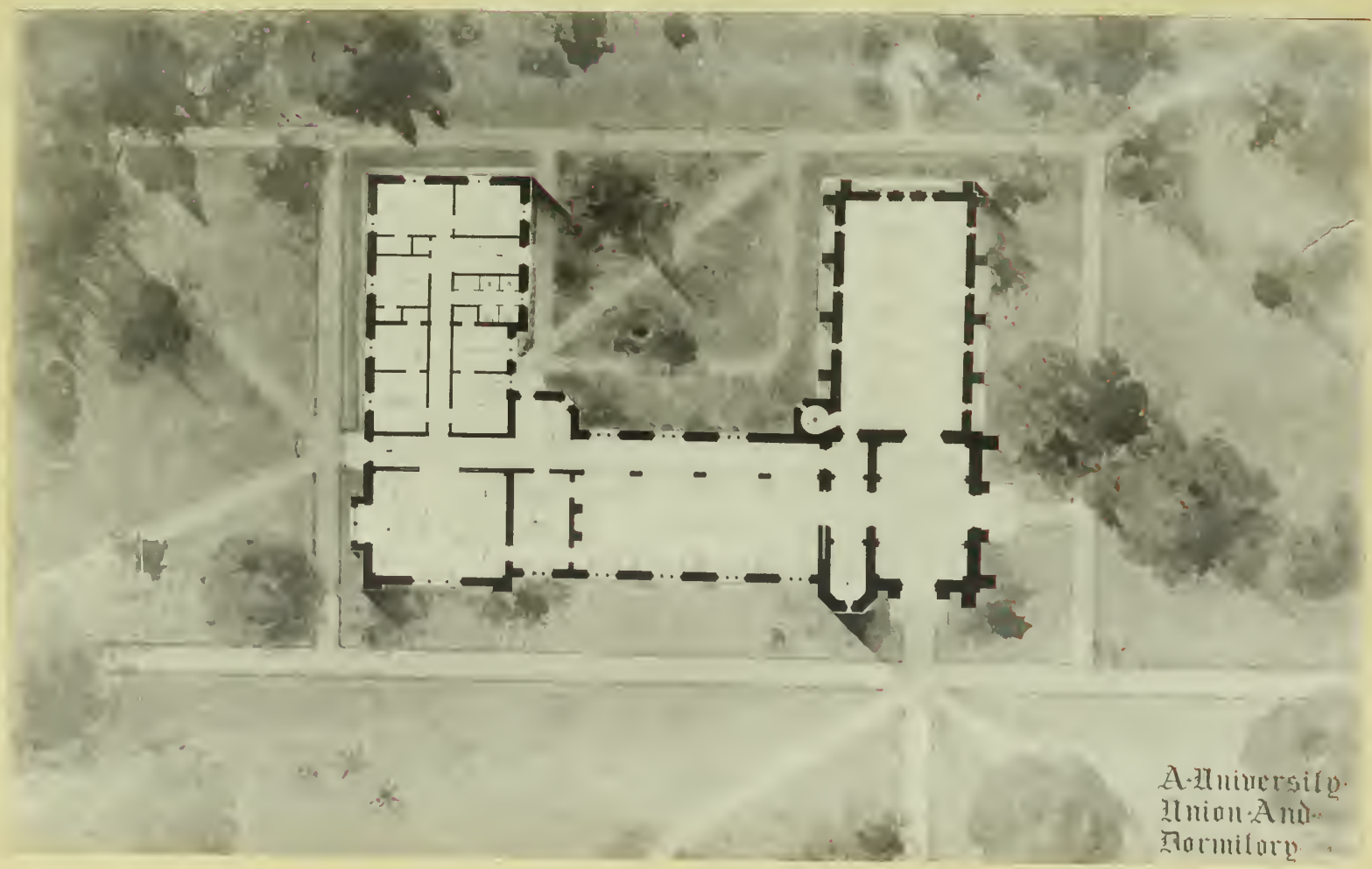

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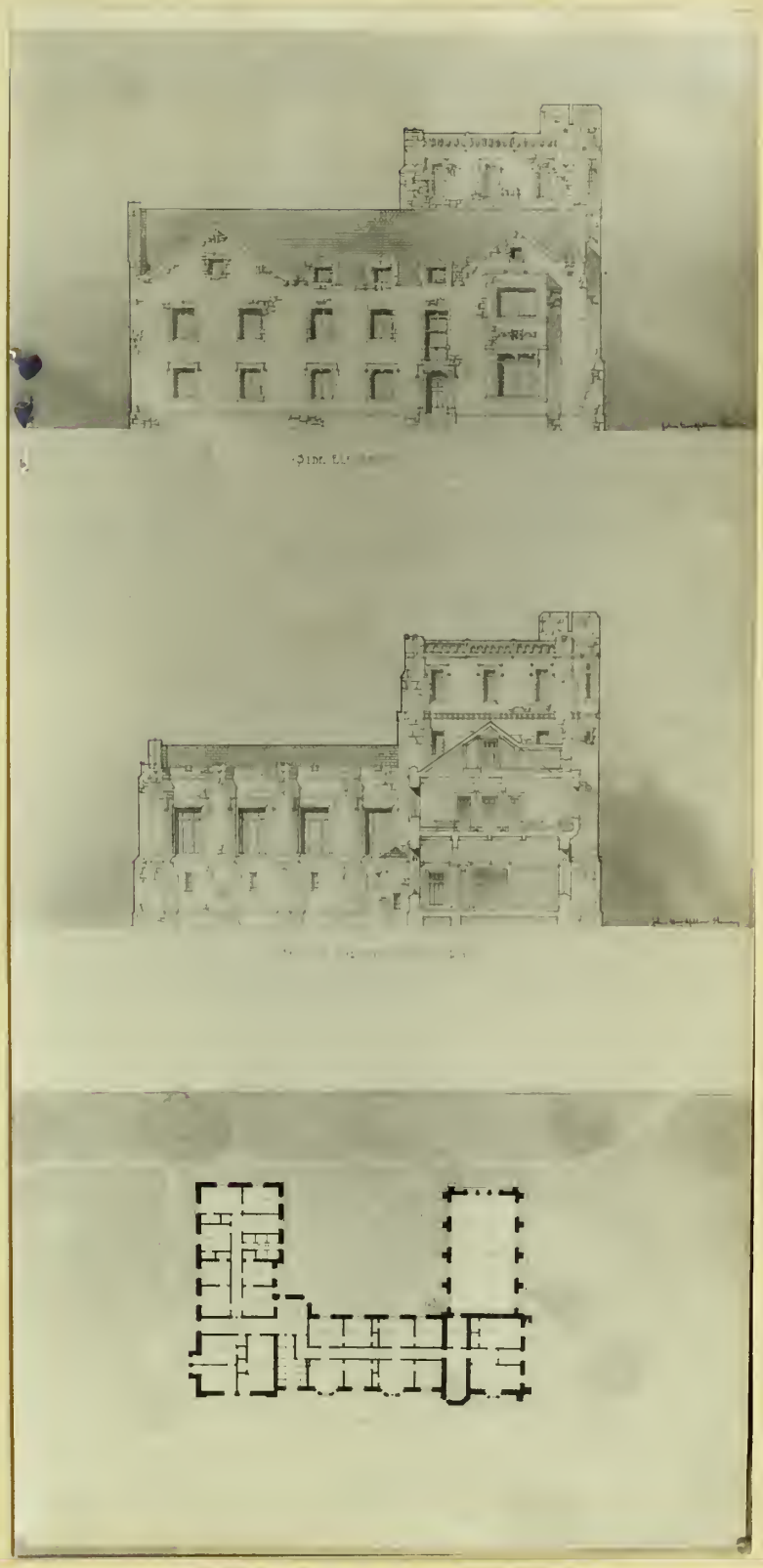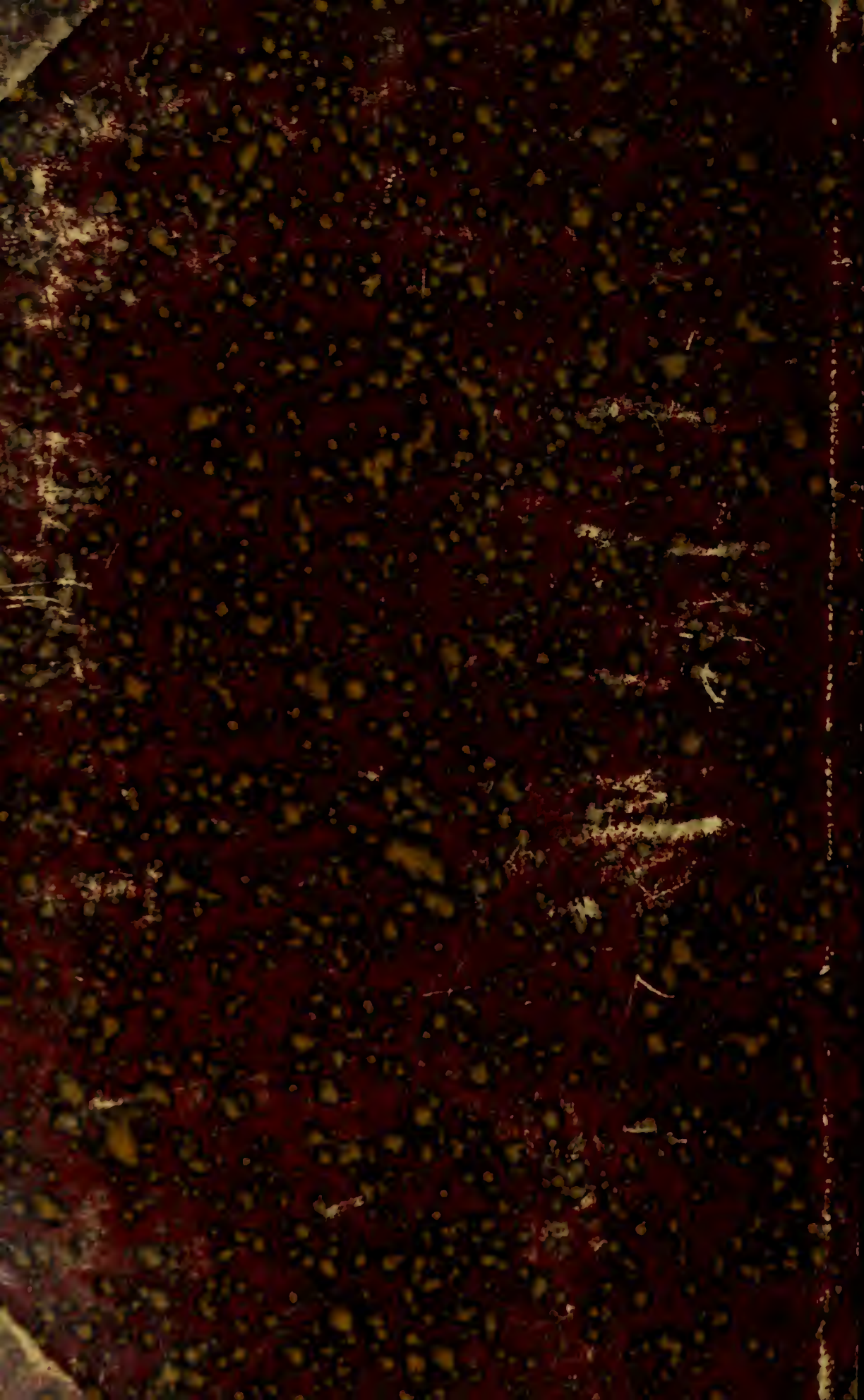
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